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ABSTRACT

Descriptions are offered of numerous approaches used in five Southern states to enable local universities to provide selected backup services to state government. The report is based on informal case studies in Florida, Georgia, Mississippi, North Carolina, and Tennessee. The descriptions of the programs reveal that a variety of organizational structures and techniques are being used in the several states to facilitate the delivery of a broad range of services by local universities to state government. Together, they comprise an interesting set of alternatives, conceived under a variety of conditions and utilizing different arrangements. Each state represents a different situation and a different response to the common problem of how universities can best organize themselves to provide services to particular groups in state government.
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University Services to State Government

Representative Approaches in Southern States

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Southern Regional Education Board

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**University Services to State Government:
Representative Approaches in
Southern States**

**Gene A. Bramlett
Editor**

**Southern Regional Education Board
130 Sixth Street, N.W.
Atlanta, Georgia 30313
1976**

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This report deals with a study conducted with the support of National Science Foundation Grant No. GI-37858. Opinions, findings, conclusions or recommendations expressed in this publication do not necessarily reflect the views of the National Science Foundation.

FOREWORD

This report is the final product of a study conducted by the Southern Regional Education Board and made possible by a grant from the Research Applied to National Needs program of the National Science Foundation. It is our hope that the study has added impetus to a realization that higher education, which is supported by society, can flourish best when its institutions participate actively in the solution of society's problems.

This synopsis of state government-university relations in five Southern states was prepared in response to discussions at a meeting of state government and academic leadership in Atlanta on May 5-6, 1975. Convened to direct attention to the findings of the "Academic Community as a Backup Force to State Government" study and explore their implications, the conference focused largely on the diversity with which government and the universities in the various states have implemented their general commitment to more effective state government-university relations.

The five approaches which are highlighted in this report are meant to be instructive as well as illustrative. They are disseminated as a stimulus to other states which may benefit by closer examination of their own structure on how better to facilitate the service of the academic community as a backup to state government.

Winfred L. Godwin
President

ACKNOWLEDGMENTS

This report is the result of the work of numerous individuals and several organizations who participated in its planning and preparation.

The procedures and outline of the content were developed during several planning sessions attended by Dr. George W. Baker, National Science Foundation; Dr. Gene A. Bramlett, University of Georgia (now Auburn University); Dr. Winfred L. Godwin, President of SREB; Mr. D. Robert Graham, State Senator from Florida; Mr. Harold F. Holtz, Jr., University of Georgia; Dr. James Meredith, Office of the Governor, State of Mississippi; Dr. William B. Phillips, University System of Florida; and Dr. E. Walton Jones, University of North Carolina.

Section II--Florida was prepared by Dr. William B. Phillips, Director of Science and Engineering of the Florida Board of Regents.

Section III--Georgia was prepared by Mr. Harold F. Holtz, Jr., Director of Governmental Training, University of Georgia and University System Representative to State Government for the Board of Regents, University System of Georgia and Dr. Howard Jordan, Jr., Vice Chancellor for Services, University System of Georgia.

Section IV--Mississippi was prepared under the supervision of Dr. E. E. Thrash, Executive Secretary and Director of the Board of Trustees of State Institutions of Higher Learning in Mississippi, with the assistance of the following persons from the Mississippi Research and Development Center: Dr. Byron Long, Mr. Robert Smith, Mr. Robert DeVille and Mrs. Maxine Smith.

Section V--North Carolina was prepared by Dr. E. Walton Jones, Associate Vice President for Research and Services, The University of North Carolina.

Section VI--Tennessee was prepared by Dr. A. B. Biscoe, Jr., Associate Vice President, The University of Tennessee.

A report of this type, in which many persons were involved in preparing descriptions of numerous programs, is sometimes vulnerable to omissions or minor errors which, hopefully, will be forgiven in view of the overall import of the report.

Gene A. Bramlett
Project Director and Editor

SECTION I--OVERVIEW

This study contains descriptions of numerous approaches used in five Southern states to enable local universities to provide selected backup services to state government. The report is based on informal case studies in Florida, Georgia, Mississippi, North Carolina and Tennessee.

The descriptions of the programs reveal that a variety of organizational structures and techniques are being used in the several states to facilitate the delivery of a broad range of services by local universities to state government. Together, they comprise an interesting set of alternatives, conceived under a variety of conditions and utilizing different arrangements. Thus, each state represents a different situation and a different response to the common problem of how universities can best organize themselves to provide services to particular groups in state government.

Purpose

The purpose of this study is to describe the methods and procedures currently being used in five Southern states to provide various kinds of university services to state governments. While there may be no unique or best approach to developing closer working arrangements between state governments and universities, some systems are undoubtedly more effective than others. Moreover, a knowledge of how some states have approached the problem may be helpful to persons in other states who may wish to improve existing university/government relationships or who are beginning for the first time to involve the universities in a supporting role to assist state government.

Background

Both the problems and potentials of involving the universities as a backup force to state governments were explored in a 1974 study conducted by the Southern Regional Education Board.¹ It confirmed that universities do include persons with unique skills as well as other resources which can be used effectively under a variety of conditions to assist state governments in many different ways. Indeed, evidence was presented that some universities regularly provide services to state government, suggesting that others might also if they were so inclined and appropriately organized.

¹Gene A. Bramlett, The Academic Community: A Backup Force to State Government, A Report to the National Science Foundation, Research Applied to National Needs (RANN) in partial fulfillment of Grant GI-37858, prepared by Southern Regional Education Board (Atlanta: SRZB, September, 1974), 199 pp.

Similarly, it was reported that many officials of state government are aware of the potential contributions that universities can make toward the solution of society's problems but that they are often unsure about how to establish effective linkages between the two groups.

A number of problems were cited as affecting the flow of useful services from universities to their state governments. One is that the traditional structures under which universities operate make it difficult for state governments to tap the particular kind of university expertise needed at the time it is needed. Inadequate funds are another barrier. State governments often lack sufficient funds to purchase services and the universities may not be funded in a way to enable them to provide free services. Also, lack of a definite structure to facilitate communication between state agencies in need of services and the universities that might provide them is another type of barrier.

Significantly, the study team did not recommend a single "best" approach or method for overcoming these barriers. Instead, it outlined the key principles involved and suggested that the best procedure for a particular state depended upon local conditions which would have to be studied and resolved. These conditions include the state of development of existing organizational structures, local attitudes and personalities, past experiences, methods of payment for services and the willingness of university and government officials to work out satisfactory linkages between them.

Method

The case studies were conducted by persons who are intimately familiar with local situations. Although each reporter was asked to follow a common outline of points to be covered, they were allowed to deviate from the outline, depending upon their judgment of the university-state cooperative arrangements that could be described in the limited space allotted. Thus, the resulting descriptions of university/government working arrangements vary considerably in scope and depth of content.

The descriptions of programs in each of the five states generally are presented in a favorable light, as would be expected of one writing about programs in his own state. Nevertheless, several of the writers candidly point out difficulties with present approaches. Where other more fundamental difficulties are glossed over, the careful reader may identify potential problems concerning the applicability of particular approaches in view of conditions in his own state.

A Comparison of State Approaches

The case studies presented in Section II through VI are concerned with the central task of describing selected programs through which local universities provide services to state government. They vary considerably, however, with respect to the number of universities included in the analysis.

Georgia, for example, begins broadly with a general orientation of all universities, then gradually narrows to a particular special project in which the major universities of the state are involved. The Tennessee report concentrates on how the University of Tennessee System is organized to serve state government and mentions only in passing that the State University and Community College System also provides services to state government. The North Carolina and the Mississippi cases deal with statewide approaches, while the Florida case study focuses primarily on one recently developed technique of delivering applied research services to state government--the STAR program.

Thus, a point to bear in mind is that the case studies generally do not include complete descriptions of all efforts to serve state government taking place in each state. Moreover, greater emphasis is placed on some approaches than on others, a decision tempered in part by the availability of information and in part by the desire to highlight particular programs or techniques which are most likely to be applicable in other states.

Commitment

Several of the case studies emphasize the long tradition of service by local universities to state government. North Carolina and Georgia are particularly noteworthy from the standpoint of the longstanding commitment of local universities to provide services to state government. Similarly, several universities in Tennessee have gained recognition, especially since World War II, because of the services they provide to state government.

In all of the case studies, the larger land-grant institutions--usually among the most diversified of local institutions of higher education--stand out most prominently in terms of their public programs. These institutions, it will be remembered, were the pioneers in extension and public service to agriculture. In more recent years, state land-grant institutions have broadened their subject matter base so that today they are among the most active type of university in terms of services provided to state government.

The commitment to serve state governments, however, is not confined to the state land-grant institutions. For example, the University of North Carolina at Chapel Hill, Georgia Tech, Memphis State and Florida State University are examples of institutions which today, if not earlier, are strongly committed to the concept of being of service to state government.

Generally, the case studies reveal that there are at least several major public institutions in each state which are strongly committed to the concept of serving state government as well as other groups outside the institutions. They vary, however, in the extent to which they have actually developed strong cooperative relationships with state government. While several institutions have highly developed public service delivery systems, others are still laboring under the weight of improvised systems which function reasonably well in some instances but not in others.

Scope of services provided

The scope of services provided to state government runs the gamut of university capabilities and government needs. They include special research projects, consulting services, and several kinds of training and continuing education activities. The programs in North Carolina and Georgia, for example, are extremely broad; ample evidence is presented to indicate that all of the categories listed above are provided in considerable volume to state government.

The Florida report emphasizes that state's applied research program carried out through the STAR program which was implemented several years ago. Undoubtedly, many other kinds of services are provided to state government by Florida universities, although they are not stressed in the report. Similarly, the forms of services provided by universities in Tennessee and Mississippi further illustrate the range of services provided by academic institutions for state government.

Organizational structures

In all of the states there is at least one university-based unit established specifically to serve state government. Georgia and North Carolina have well-organized Institutes of Government. In Tennessee, there is a Municipal Technical Advisory Service to serve municipal governments, a County Technical Assistance Service for county governments and a Center for Governmental Training designed to coordinate training and career development courses for employees of both local and state governments. Similarly, the Bureau of Governmental Research at the University of Mississippi and the systemwide STAR program in Florida are mechanisms for providing services to state government.

Each of these programs, however, vary widely in the way they are structured, their relationship to state government, how they are funded, and the principal groups in state government for which the services are provided. The University of North Carolina's Institute of Government (Chapel Hill), for example, is oriented more to the needs of the state legislature than to operating agencies of state government. Nevertheless, it is an unusually active group in terms of the services it provides to the legislative branch. The Institute of Government at the University of Georgia combines within a single unit powerful service capabilities to all levels of government in that state. Each of the University of Tennessee's three-unit complex specializes in a single activity, e.g., governmental training or services to municipal government or services to county government.

Mississippi's unique Research and Development Center at Jackson is significant not only from the standpoint of the services it provides to state government, it also illustrates an unusual blend of state government/university control, with state government apparently playing a larger role in its governance than the academic units. Finally, Florida's STAR program, which concentrates on applied research to state government, is operated systemwide and includes the participation of a number of educational institutions in that state.

Overlying these units, which are designed primarily to serve state government, are scores of specialized units which frequently or occasionally assist state government in relatively narrow fields. North Carolina is particularly noteworthy in this regard. Universities in that state operate some 60 specialized centers and institutes which provide services on narrow topics such as water research, urban problems, environmental concerns, highway safety, nutrition, marine science, engineering design, population studies, statistics, human resources and computational services. Although all of these specialized centers and institutes do not regularly provide services to state government, they have the capability of doing so, and many of them do provide services to state government from time to time.

Similarly, the University of Georgia operates several different specialized centers and institutions which frequently provide services to state government. In Tennessee, the UT System has combined nine distinct service units under one management called the Institute of Public Service. Although each of the nine units has a special mission, they are combined under a single umbrella for management and coordination.

From these brief comparisons, several features stand out. First, each of the five states considered has several university-based units which can and often do provide services to state government. Second, the manner in which the servicing units are organized and managed varies in the extreme among the several states. Third, although it is hazardous to draw a generalization from the information available, it would appear that the universities in North Carolina, Georgia and Tennessee have more broadly-organized university-based programs to serve state government--and may be providing service over a broader spectrum of subjects--than either Florida or Mississippi.

Variations in policies and procedures

Wide variations exist among the five states in terms of operating policies and procedures governing the university-based units that serve state government. In Florida, for example, the terms under which the STAR program operates are rather well-defined, but appear to be evolving as new experience is gained. The university units serving state government in Georgia, North Carolina and Tennessee are well-defined but flexible. Moreover, they are not necessarily standardized among institutions within those states. Policies and procedures among university-based public service organizations in Mississippi appear to be less precisely defined than in the other states, and they, too, vary greatly from one institution to another.

Funding

The funding arrangements of service activities provided by universities to state government also vary in the extreme both among and within the states studied. North Carolina, Georgia and Tennessee are similar in that some of their major public service units have a substantial base of hard funds supplemented by other funds from a combination of federal sources and contracts and grants. The Florida STAR program is funded largely by direct appropriations from the state legislature to the Board of Regents which, in turn,

allocates the funds to various institutions. The Mississippi universities receive some government funds for service activities, but (except for the R and D Center) the amounts appear to be less than in the other states. This is probably due in part to great reliance by state government on the R and D Center for state services which, in effect, lessens the need for services from the teaching-oriented institutions.

There appears to be no clear pattern with respect to who originally provided the initiative for established public service programs in the five states. In a number of cases, however, particular operations were created by acts of the state legislature. Examples are the Institute of Government in North Carolina, the R and D Center in Mississippi, the STAR program in Florida and several of the Tennessee programs. Some of these programs, however, may have received their initial impetus from the universities with the state legislatures merely effecting the arrangement by appropriate legislation. The extent to which this was the case is sometimes unclear from the discussions.

Program variations

The programs of the five states differ in many respects. The delivery system for university research which Florida is in the process of developing, for example, emphasizes the annual reassessment of priorities and aims at achieving the best possible mix of activities from total available resources.

Perhaps the most unusual program among the five states is Mississippi's R and D Center. It is the only program which appears to be more closely identified with state government than with local universities. Although it is lodged in the local university system for general administrative purposes, it is basically a unit of state government. It is governed by a special council and derives its basic support from the state. Moreover, it is a non-teaching unit; its primary mission is research and consultative services, including state and local governments. No similar arrangement exists in any of the other four states.

The "special project" described at some length in the Georgia paper appears to be a unique procedure for effecting communication between state government and local universities. Although it is not a program in the usual sense, it extends across all university-based public service operations and across all levels of state government. The primary purpose of this special activity is to improve communication regarding specific needs of state government and the availability of services within the universities. It takes a light touch with respect to coordination by encouraging other programs to thrive. It involves systematic visits with units of government that might be in need of services but which, for one reason or another, are not being adequately served by the universities. The manner in which this special activity is being carried out in Georgia deserves special attention.

The University of North Carolina's Institute of Government likewise deserves special consideration. This unit is operated almost entirely for the North Carolina legislature and derives the bulk of its funding from the legislature. But even with this special mission, it is still operated by the university, within the procedure prescribed by the institution, using

university faculty with full academic credentials. The delicate balance that is maintained between state government and the university is a point deserving special attention.

Finally, the two Tennessee units--one serving municipal governments and the other serving county governments--are somewhat unusual in terms of their funding arrangements. Both receive a portion of the state's tax revenues which are earmarked for the regular support of these operations. Although they exist primarily to serve local, in contrast to state governments, their unique funding approaches may be applicable to other situations in other states.

Conclusion

The case studies of university-based service operations in the five states generally are too sketchy to provide detailed information about how they are structured and how they serve their state governments. In general, however, the presentations are sufficiently detailed to identify some of the major differences and similarities of each approach. Moreover, they suggest several different types of approaches, some of which might be applied by universities and governments in other states.

To illustrate, it is clear that North Carolina's universities are heavily involved in assisting state government, using a large number of specialized, as well as several broadly-based, public service organizations through which university services are channeled. Tennessee and Georgia have fewer public service units than North Carolina, but they, too, have broad commitments and annually provide a large volume of services to state government. These programs contrast strikingly with Florida's approach through its STAR program and Mississippi's R and D Center. Perhaps from study of these varied arrangements one can identify leads that might be applicable in other states.

SECTION II -- FLORIDA

The Setting

General

The state University System of Florida is composed of nine universities, with one branch campus, 14 off-campus centers, 20 agricultural research and education centers, and cooperative extension programs in each of the state's 67 counties. The state University System is governed by the Florida Board of Regents, a corporate body consisting of nine members, appointed by the Governor, with the approval of three additional members of the Florida cabinet, and confirmed by the Senate. The term of appointment is nine years. The Board of Regents selects the heads and approves all programs of the state universities and receives a lump sum appropriation from the legislature. State appropriations are then allocated to the various institutions by the Regents.

In recent years, the state University System has been characterized by very rapid expansion and growth. Since 1960, the number of universities has grown from three to nine, and student enrollment has risen from 27,000 to 114,000. Four of the six new universities built during the past 15 years are upper division institutions which provide instruction at the junior, senior, and graduate levels only.

Florida's primary goal is to build an unexcelled state university system of higher education consisting of distinguished state universities which will collectively provide the citizens of Florida with educational opportunities in all disciplines and at all degree levels without unnecessary or wasteful duplication or proliferation. To accomplish this objective, each university has strengths in certain areas, but no institution offers programs in all disciplines and at all levels.

The universities involved

The University of Florida in Gainesville and the Florida State University in Tallahassee, the two oldest of Florida's public universities, offer diverse undergraduate, graduate, and professional programs of study for advanced graduate and professional studies. The University of Florida offers the state's only doctoral programs in engineering and agriculture and extensive medical programs, including the state's only programs in dentistry and veterinary medicine. Florida State University has strong program emphasis on the fine arts, including the state's only doctoral level programs in art, music, and theatre.

Florida A&M University in Tallahassee is in a period of development and change of emphasis from an institution serving a predominantly black student body to a racially-balanced university with high quality programs in architecture, pharmacy, journalism, and others. The University of South Florida in Tampa is a developing institution which offers a limited number of doctoral

programs, and which has directed many of its research efforts toward solutions of problems peculiar to the urban environment.

Florida Atlantic University in Boca Raton, the University of West Florida in Pensacola, Florida Technological University in Orlando, Florida International University in Miami, and the University of North Florida in Jacksonville are regional universities, established to serve the educational needs of their respective regions. These universities offer graduate programs through the master's level. With the exception of FTU, all are upper-level institutions whose students are drawn primarily from the graduates of nearby community colleges.

These universities serve the educational needs of the state through 954 degree programs. A number of these programs utilize non-traditional educational delivery systems, including "external degree" programs, an "open university", and continuing education programs. In 1974-75 over 1600 continuing education credit courses, offered at 50 locations throughout the state, served more than 32,000 students. By means of these mechanisms, 95 percent of the population of Florida has access to university level academic programs within a reasonable commuting distance.

Description of Public Service Programs

The entire State University System is committed to the land-grant college philosophy of research and service to the people of Florida. Long established programs of university service include the agricultural research and education programs and the Engineering and Industrial Experiment Station at the University of Florida. More recently developed university service activities are illustrated by the Florida Resources and Environment Analysis Center at Florida State University and the Urban and Environment Research Center at Ft. Lauderdale which is operated by Florida Atlantic and Florida International Universities. Six public and two private universities plus one community college participate in the State University System of Florida Sea Grant program. These research, advisory and educational programs currently are supported by a \$1 million grant from the National Atmospheric and Oceanic Administration of the U. S. Department of Commerce.

In order to provide more effective vehicles for the coordination of large scale multi-university research activities, the State University System Institute of Oceanography (SUSIO) located in St. Petersburg, and the Florida Solar Energy Center (FSEC) at Cape Canaveral have been developed. In each case these systemwide activities are managed by a director who reports to the central office of the Board of Regents, though logistical support and services are provided by the nearest university--the University of South Florida in the case of SUSIO, and Florida Technological University in the case of FSEC. In addition to coordinating ship time and oceanographic research activities among Florida universities, SUSIO currently manages a consortium of researchers from Florida's public and private universities, out-of-state universities and private laboratories who are engaged in documenting environmental conditions in the eastern Gulf of Mexico prior to commercial oil-drilling operations. This is

supported by a \$3.15 million contract with the Federal Bureau of Land Management. The Florida Solar Energy Center, which began operation in 1975 with a \$1 million state appropriation, conducts research, testing and information dissemination programs dealing with solar energy. Florida's public and private universities, as well as other appropriate organizations, may participate in the Solar Center's activities.

The STAR Program for State Government

During the past three years, the state university system has allocated a total of \$3 million for state-related research and public service projects. These monies came from the educational and general state budget appropriation which had been formula-generated for research at the universities. During 1973-74 and 1974-75, the legislature earmarked funds in the appropriations bill for this purpose. In 1975-76, no funds were earmarked, but the Board of Regents allocated \$1 million for state-related research projects to serve as a precursor to developing a program known as Service Through Application of Research (STAR).

During 1973-74, \$1 million earmarked for research on problems relating to the missions of the various state agencies was used to fund 40 research projects at the state universities. In 1974-75, more than \$1 million was used to fund an additional 41 projects plus \$100,000 allocated for solar energy research at the University of Florida. In addition, \$100,000 was allocated for the Governmental Law Center at the Florida State University, and \$50,000 for red tide research by the University of South Florida and the Mote Marine Laboratory of Sarasota. During 1975-76, another \$1 million was allocated for 47 research and public service projects at the state universities.

Project selection process

The projects funded were selected from proposals submitted to the Board of Regents from the universities in response to research needs expressed by state agencies. In 1974-75, a letter was sent to the head of each state agency requesting submission of problems related to the respective missions of each agency which university researchers might help solve. The professional staff of the Board of Regents then directed these requests to the universities best equipped to respond to the state agency requests. Research proposals prepared by university researchers were returned to the respective agencies which had originally requested the research for their review of the proposals and an assessment of whether the proposed projects appropriately addressed the problems identified by the agencies. A Research Priorities Advisory Committee, composed of representatives from the two houses of the legislature, the governor's office and the chancellor's office, established priority rankings for broad research areas, but did not review the individual proposals. Regents professional staff used these priority rankings when evaluating and recommending projects for funding.

Each state agency that requested research projects was encouraged to share in the cost of the research. Among those projects funded in 1974-75, agency cost sharing ranged from none to 62 percent of the total cost of the project. Overall, agency contributions totaled \$286,172, or 18 percent of

the total project costs. Projects funded during 1973-74 were selected from requests totaling more than \$3 million. In 1974-75, state agencies submitted more than 300 requests with a total cost in excess of \$9 million.

In order to accelerate the funding decision process and to make allocations available to researchers early in the academic year, state agencies were asked in 1975-76 to request research projects prior to final passage of the legislative appropriations act. Still, more than 140 project requests were received which would have required in excess of \$5.5 million to complete. Because only \$1 million in Regents' funds were available for these projects, it was not considered worthwhile to solicit from university researchers proposals for projects which had little likelihood of being funded. Thus, only those projects for which a state agency was willing to supply substantial "hard" matching funds (in contrast to in-kind or service matching), plus continuations of projects funded during the previous years, were sent to the universities.

In addition, universities were permitted to submit proposals to perform research or services for local agencies which were willing to supply substantial cash matching (defined as 15 percent or more of the total project cost) and these proposals were allowed to compete with others returned from the universities. Sixty-one of the latter type proposals, for which \$1.73 million from Regents' funds would have been required, were received. In 1975-76, agency contributions totaled \$276,965 in matching funds, or 22 percent of the total project costs.

The future of STAR

The STAR project is intended to provide a vehicle for the expansion and broadening of state university research and service activities. While the final STAR plan has not yet been approved by the Board of Regents, it is anticipated that the program will function in the following manner. An academic task force, composed of representatives from each of the state universities, will develop a proposed set of program areas for which funds are to be requested from the legislature to support research and service activities. A Research and Service Advisory Council composed of not less than seven members, including nominees of the governor, the president of the Senate, the speaker of the House, and the chancellor (who will serve as chairman), will receive the academic task force suggestions and recommend the number of program areas and level of funding to be requested from the legislature.

Each state university will be advised of the research and public service program areas determined by the Advisory Council. Similarly, state and other public-oriented agency heads will be advised of priority program areas and will be encouraged to communicate to the Board of Regents specific project needs which, in turn, will be transmitted to all state universities. After formal project proposals are received in the central office of the Board of Regents, outside technical consultants who are specialists in the fields covered by the proposals will be employed to review and make recommendations on projects to be funded. Final recommendations on the specific project to be funded will not be developed until after the legislature has met and the governor has signed the appropriations act, after which awards will be made to successful project proposers.

In addition to project research, long-term university inter-institutional and systemwide research and service centers and institutes will also be funded as a part of the STAR program. These may include SUSIO, the Solar Energy Center, and others. Presently, these proposed policies and procedures for the operation of STAR are in unapproved draft form.

General assessment of STAR

A full analysis and evaluation of projects funded under the state-related research program is now becoming possible since the projects funded during the first year of the program are now being completed. Twenty thousand dollars of the \$1 million allocated during 1975-76 is being used for evaluation; the results of the evaluation study should be available in the Spring of 1976. More extensive, ongoing evaluations will be conducted during 1976-77 and in subsequent years.

Even in the absence of final evaluations, however, several preliminary observations are evident. First, the state-related research projects appear highly successful in terms of interest and participation by the various state agencies. It must be noted, however, that some of these same state agencies have supported university research directly in the past. It has been suggested that a few agencies might have viewed the STAR program as an opportunity to obtain some of the same research with the expenditure of fewer dollars from the agency budget than would have been the case in the absence of the state-related research program. It is also apparent that in some instances project requests were actually generated by university researchers who then found an agency which would serve as broker in transmitting the request to the Regents' office for direction back to the university researcher from whence it came. As might have been anticipated, agency attitudes and abilities for cost sharing in research projects vary widely.

Secondly, state university researchers have the capabilities and interests for attacking a wide variety of real problems of immediate interest to the state. Energy, the environment, econometrics and educational concerns have been prominent in projects funded to date. It might be of interest to examine the priority ordering recommended by the STAR academic task force to the Research and Service Advisory Council for future funding. Using the ten State of Florida program structure areas plus energy as an eleventh area, the task force recommended:

1. Natural Resources and Environmental Management
2. Energy
3. Education
4. Health
5. Social and Rehabilitative Services
6. Crime Control
7. Manpower and Employment
8. Business, Agriculture, and Consumer Services
9. Transportation
10. Governmental Direction and Support
11. Recreation and Culture

As expected, several problems have been identified in conjunction with the state-related research program. Satisfactory solutions have been found to problems, such as the possible lapsing of project monies because they remained unspent at the end of the fiscal year. All projects are funded by a transfer of funds into university grants and donations trust funds which do not revert back to the state at the end of each year. Moreover, time extensions for projects which cannot be completed as originally scheduled have been given routinely.

Solutions to some other problems have been more elusive. In a few instances, state agencies have been unable to provide their share of funds pledged when projects were proposed. While some agencies have been content to transfer their share or funds to a project account at its beginning, other agencies have required periodic progress reports and have transferred funds only upon certification of completion of work.

During the first year of the program, matching funds pledged by some state agencies turned out to be only in-kind secretarial, duplicating or computer services, which could not always be utilized by the individual researchers to the desired extent. A recurring problem for the universities has been that of recovery of actual indirect costs for projects done for state agencies. The Regents' monies for the state-related research projects have thus far all originated in the universities' educational and general budget. Because budget support costs and personnel are built in on a formula basis, the distribution of state-related research funds to the universities has been approximately in the same amounts they would have received for research had there been no state-related research program. Thus, the indirect costs actually preceded the allocation of Regents' state-related project dollars to the institutions. However, the state agency funds which institutions received from these projects were not similarly accompanied by any "overhead". The propriety of overhead payments from one state agency to another is not easily agreed upon in all cases. This problem has been specifically identified in STAR planning. It has been proposed that actual indirect costs for future research be identified and recovered from state agencies.

Another problem of considerable concern to the universities is stability and continuity of funding. During the recent period of rapid growth, this was much less of a problem because persons hired on soft money could usually be absorbed into the university after the contract on which they were hired had terminated. However, in a period when university resources are stabilizing or possibly even shrinking, accommodation of persons hired on contract research has become more difficult. For this reason, the STAR project has been designed to address priority areas for research in terms of a 5-year plan which will be updated annually. A research management information system, including an inventory of all State University System mission-oriented research and service projects, is now being developed by the Board of Regents staff. It is hoped that the new procedure will aid in the identification of sources of information on specific research problems and make possible widespread and effective information dissemination concerning the results of this research.

Summary

In summary, the State University System of Florida is firmly committed to the land-grant university philosophy of applied research and service to the people. This commitment has been demonstrated through the formation of system-wide inter-institutional institutes and centers to coordinate and facilitate the best use of all available talent in the universities for these programs and by the funding of \$3.3 million of research and service projects during the past three years.

Furthermore, the development of the STAR program, which provides a vehicle for the further expansion of applied research programs in the state universities, is a reinforcement of that commitment. The actual mechanics of funding state-related research projects in Florida universities have evolved during the past three years and further refinements of the mechanisms will be developed as the STAR program becomes operational. A careful monitoring of the results of the applied research, and its usefulness to the agencies which initially requested the work, is in order and is being developed. University concerns about indirect costs and stability of funding must be satisfactorily resolved. Finally, an effective information dissemination system must become operational to make the results of this research readily available for potential users.

SECTION III--GEORGIA

The Setting

The University System of Georgia consists of thirty-one separate institutions, including fifteen junior colleges, twelve senior colleges, and four senior universities. The responsibility of the University System of Georgia to perform a public service function was delineated by the Board of Regents in a policy statement, in 1971, which serves as the basic guideline for public service activities throughout the System. The University System, however, has had a major commitment to public service for many years, as indicated by its provision of basic funding for certain specific public service activities. In part, the 1971 policy statement expressed the system's commitment to an expanded program of public service within all units of the system, and to encourage universities and colleges within the University System to provide resources necessary to accomplish the purposes explicit in carrying out this responsibility. For example, at the University of Georgia a total of \$23 million was devoted to public service and extension activities in 1975.

The statement emphasized that institutions of higher education are becoming a major instrumentality through which our nation is attempting to deal with some of its more important and pressing problems, and mentioned that the University System has a long and distinguished public service record with Georgia government agencies. The provision of additional programs of public service for government officials was one specific area mentioned for attention by individual institutions and the system as a whole. Each institution in the system was charged with the responsibility of developing and implementing a program of public service which applies the resources of the institution to the problems and needs of the people and communities which it serves.

A vice chancellor for services is responsible for the overall direction of the University System's public service activities and each institution has someone designated as public service director. It is understood by individual institutions that mutually cooperative and supportive relationships are essential in carrying out many of its programs.

One major mission of the University System of Georgia's public service program is to make maximum use of the system's resources when they can relate to problems, issues or needs of Georgia's state government agencies. It performs this mission through applied research, special studies, off-campus classes (credit and non-credit), workshops, seminars and technical assistance. To illustrate, junior and senior colleges provide assistance to state government district offices located in their regions, and some provide statewide assistance when special skills are available. A major law enforcement program was recently provided to the State Department of Public Safety by Georgia Southern College.

The major public assistance to state government, however, is provided by the system's four senior institutions. As typical examples, major services are regularly provided to (1) the State Department of Transportation by the

Georgia Institute of Technology, (2) the State Department of Education by Georgia State University and (3) the State Department of Human Resources by the Medical College of Georgia.

Many of the public service programs of the University System are organized and implemented somewhat independently by component institutions. Others involve two or more institutions through voluntary cooperation. Some special projects, however, involve the University System's vice chancellor for service in an operational manner with one or more institutions participating. These diverse arrangements for delivering services, either to state government or other groups, provide maximum flexibility and effectiveness.

The following discussion focuses first on the public service program of the University of Georgia--the largest and most active unit of the University System in terms of public service activities. Although the University's diverse public service operations are noted, emphasis is placed on those programs which are most active in serving state government. This is followed by a description of a special program operated by the University System which is designed to expedite services to state government.

Description of Programs at The University of Georgia

As a land-grant institution, the University of Georgia has an outstanding history over many years of providing public services to state government in a special way. The University's program of service is administered by a vice president for services who is responsible for establishing policies, coordinating existing programs, developing new activities, and resolving conflicts. Every day, in many ways, in all parts of the state, university personnel are assisting state government agencies.

The Institute of Government

Although many units of the University of Georgia are heavily involved in serving state government, one unit--the Institute of Government--is totally devoted to developing better government for the people of Georgia.

For over 25 years this service unit has regularly assisted all branches of state government. The Institute makes available its many resources to state government through programs of continuing education, technical assistance and research. Attempting to upgrade the quality of state governmental services, the Institute provides educational training programs for state agencies and legislative committees, keeping them abreast of the latest developments in their fields in order to better equip them to tackle complex state issues. The Institute also studies particular problems of the state for state agencies and legislative committees and supplies expert opinions on how to improve programs. It offers consultation and advice to those with special needs, and conducts research on general governmental matters which often have wide-

ranging effects. Several hundred individual activities for state government are undertaken each year.

The following are typical examples of activities provided in each service area during the current year:

Continuing Education--implemented a 200-hour Certified Manager Program for State Management Personnel, in cooperation with the State Merit System;

Technical Assistance--provided technical services on reapportionment matters to the House Legislative and Reapportionment Committee and to individual members of the Georgia General Assembly;

Research--conducted a Study of Local Government Revenue Services and an Analysis of Alternatives in Georgia for the Georgia General Assembly.

Many activities undertaken by the Institute are offered cooperatively with other units of the University and with other institutions in the University System.

Other public service operations

The following are other major units of the University of Georgia which have significant levels of public service involvement with state government, together with examples of how they serve:

Center for Continuing Education--assists in planning and conducting all educational programs, provides educational facilities, provides educational television coverage of state legislative sessions, conducts staff development activities in adult counseling for all state departments;

Cooperative Extension Service--assists in community development, housing and consumer protection activities, provides help to State Department of Agriculture;

Institute of Community and Area Development--technical and general programming assistance to state departments of Community Development, Natural Resources, Public Safety, Human Resources, and Transportation;

Institute of Continuing Legal Education--a cooperative program of the state's law schools and the Georgia Bar which provides assistance to the state judiciary branch;

Marine Resources Extension Program--marshalls the resources of the University System relative to the needs of the coastal region of the state;

Institute of Natural Resources--provides continuing education and technical assistance to the Department of Natural Resources.

In addition, the colleges of Arts and Sciences, Business Administration, Education and Agriculture, and the schools of Home Economics, Journalism, Law, Pharmacy, Social Work and Veterinary Medicine provide many public services to state agencies and legislative committees as requested. For example, the College of Education assists the Department of Offender Rehabilitation in operating its Staff Development Center which is located on the University's campus.

A Special University System Program to Serve State Government

Purpose

In 1972 the chancellor of the University System and the governor established a special program to deliver to state government agencies, including the legislature, additional services in the public interest which are available or could be made available within the University System. This special program was designed to preserve existing direct relationships in public service between individual state government agencies and University System institutions and/or individual University System faculty members. In addition to existing efforts, however, the intent was to develop a formal communication and delivery mechanism with state government agencies and with University System institutions to provide additional services to state government.

Relationship to other system programs

Basic to the new program was the conviction that currently operative channels of communication and effective cooperation should not be blocked or buffered in any way but, instead, encouraged to grow. The primary responsibility of the new effort is to do the following:

provide state officials a clear path to seek assistance;

transmit information on University System service capabilities to stimulate state agencies to make greater use of system resources;

encourage state officials to determine needs and request assistance as much in advance as possible in order that faculty and program resources can be allocated to relevant institutional and agency priorities;

increase the volume of service activity in the most efficient manner as state agency demands increase;

stimulate individual institutions to provide additional public service activities to state agencies and legislative committees.

Administration

The chancellor designated the vice chancellor for services to administer this special program. He, in turn, selected a senior professional staff member who is experienced in state government to serve as the system's representative and to implement the program. The vice chancellor for services requested that the presidents of the three major universities each select a top level administrator knowledgeable about a wide range of resources in that institution who could become the liaison for the system's representative. Those selected were a vice president for research, a vice president for service and a dean of the business school. In all other system institutions the public service representative serves as the point of contact.

Concurrent with this action, the governor requested each state department head to select a department representative through whom all requests for service from this University System project would be channeled and to whom the system's representative would relate potential types of public service assistance. Most state department heads decided to serve in this capacity themselves, and the remainder appointed senior professional staff members. The state legislature is represented by the lieutenant governor, the speaker of the house, and the chairmen of major standing committees in the House and Senate. After all representatives were selected, the chancellor and the governor held an informational meeting to acquaint state government representatives with the program and to encourage their participation.

In a typical situation the procedure for bringing appropriate University System resources in contact with an agency of need is as follows:

1. Agency representative presents to the system representative an agency need.
2. System representative contacts major university institutional representatives and/or other public service representatives to determine potential participants in the project from those institutions--an unnecessary step when the system representative is familiar with the resources available.
3. System representative makes decision on the best resource in the system which is both capable and available within the time frame desired.
4. System representative briefs selected faculty participants and arranges a meeting with agency representative. If the project cannot be handled within the institution's budget, the system representative will negotiate a contract between the state agency and the institution, or find an additional source of funding.
5. System representative provides administration and coordination for the project if the institution and the agency desire, or no involvement at this stage if the parties prefer.
6. A status report for each project is maintained by the system representative to insure mutual satisfaction and to make an evaluation and followup.

In order to insure regular communication between the system representative and the designated state government representatives for liaison, each liaison person is visited periodically during the year by the system representative. These visits have served to better acquaint each state agency with training, technical assistance and research capabilities of the University System which might be of assistance to that state agency.

Results

Each state agency has made its judgment as to how the University System's special project can assist most effectively. During the initial 39 months of this project, the greatest volume of activity has been in designing and conducting special in-service career development continuing education programs. A total of 465 distinct programs have been conducted, which were attended by 18,061 appointed and elected state government officials. Also, 93 technical assistance and research activities have been undertaken to assist specific state agencies and legislative committees. Such a volume of activities is evidence enough that the approach functions quite well.

The following are exemplary activities undertaken in this special project:

The State Department of Transportation (D.O.T.) requested the development of a seven-week (200 hour) course to train twenty highway engineers to write required environmental impact statements. Under contract with D.O.T., the University of Georgia's Institutes of Government and Ecology, in cooperation with faculty at Georgia State University, designed and conducted the course.

The Georgia House of Representatives' Ways and Means Committee requested the preparation of a booklet, in a relatively concise and readable format, on state taxation structure in Georgia and other southeastern states. Faculty members from the Georgia Institute of Technology, Georgia State University and the University of Georgia completed the 93-page document in 6 months, using regular University System service funds.

The Georgia Public Service Commission requested the system representative to recommend someone knowledgeable in economic forecasting to assist the commission in a proposed rate increase hearing. Funds were provided by a commission contract.

The Georgia Senate Industry and Labor Committee and House of Representatives Industrial Relations Committee requested a workshop on labor legislation affecting local and state government agencies. Regular University System service funds were used.

The state Departments of Natural Resources and Human Resources each requested team-building seminars for their commissioners and all division heads. Long-term sessions were conducted for each group using regular University System service funds and federal support.

Policies and procedures

In providing assistance to state government using any of the University System's delivery mechanisms, there are three factors which deserve special mention--financing, faculty participation and response time.

Financing. Many service activities are provided at no cost by service units which are state and/or federally funded for specific purposes. Often, however, it is not possible to totally fund a project with one agency because it would commit all of the service unit's staff time in too narrow an area. In such cases, manpower commitments, operating costs, travel expenses and duration of the project become important considerations in determining whether there is any charge or even a substantial charge. In almost all cases, if a full-time member of the teaching faculty is used for any substantial amount of time, it is necessary for the state agency to reimburse the institution for the faculty member's time in order to have a replacement assume his teaching load. The critical considerations in determining reimbursement rates are the basic purpose and funding sources of each unit within each institution. Overhead is often waived, or at least reduced, by service units specifically established to provide services to state government. The securing of state agency contracts, where necessary, has not been difficult to justify to state agencies.

Faculty participation. There has been a substantial increase in interest by faculty and professional staff to participate in state government activities. Teaching faculty participation requires (1) sufficient advance planning to secure a classroom replacement and (2) funds for the replacement. Research faculty participation requires that unit of the institution to release the faculty member from other commitments or secure funds to seek a temporary replacement. Providing for payment of faculty overload is a third method. Major strides have been made in securing recognition of public service activities when considering faculty promotions and salary increases, however, service activities are not considered equally with teaching in the undergraduate and graduate classrooms or with research.

Response time. In some major public service projects, state agencies plan ahead and allow institutions sufficient developmental time. However, any institution planning a major program of public service to state government must be prepared to respond quickly with a first-rate product. Adequate time for planning and development at a moderate pace is the exception.

An Assessment

University System of Georgia institutions, state government agencies and state legislative committees are generally pleased with the many successes of their joint efforts over many years to best utilize available University System resources to provide varied services to state government. Every effort is being made to further expand service activities using existing methods of service delivery and by developing additional delivery mechanisms when necessary.

It is emphasized, however, that this special approach used in Georgia to service the needs of state government was not conceived and successfully implemented as a means of starting from a bare beginning. Rather, it was a refinement of a system long in existence. It was built on years of successful involvement between several of the state's universities and many units of state government. It did not insist that past relationships between specific university groups and state agencies be rechanneled through a central office for coordination; rather, such independent relationships were encouraged.

Moreover, this special technique probably could not have been implemented successfully without the existence of established public service units within several of the state's major universities where seasoned personnel were committed to the mission of public service.

Finally, the approach would not be nearly as successful if the funding of services depended entirely on contractual relationships between state government and the universities. The basic funding provided directly through the budgets of the universities involved—with the state paying for those services which are beyond the universities' capabilities—is a vital factor in the success of the program.

SECTION IV--MISSISSIPPI

The Setting

The higher education system in the state of Mississippi encompasses a broad range and depth of resources which historically have been of substantial benefit to various levels and units of state government. The pattern whereby services are provided to state governmental units may be characterized as diverse and unstructured but sensitive and responsive to government needs and requests. Much of the current pattern has been influenced by factors which are unique to the state, e.g., geography, economics, demography, politics and history.

Features of state government

In Mississippi, power at the state level lies primarily within the legislature, especially legislative committees. The governorship is generally considered one of the weakest among the 50 states. Conversely, the legislative branch is among the nation's strongest. There is little evidence, however, that this feature of state government significantly affects the extent to which the universities provide assistance to state government.

Features of higher education

The range of postsecondary educational and research institutions in Mississippi includes sixteen public junior colleges, eight private junior colleges, nine private senior colleges, eight public universities and two major research operations, one aimed at the total development of the state's economic resources and one dedicated to developing its marine resources. Within the public realm, all postsecondary education is guided by either the Junior College Commission or the Board of Trustees of State Institutions of Higher Learning. The former performs only a coordinative role for public junior colleges while the latter exercises more direct control over the institutions' teaching and research operations.

The Board of Trustees of State Institutions of Higher Learning is a constitutional board set up to oversee the state's system of senior colleges and universities. In addition to coordinating these institutions and their activities, the Board is responsible for two other agencies: the Mississippi Research and Development Center and the Gulf Coast Research Laboratory.

The ten major institutions under the Board of Trustees (and their approximate enrollments in 1975) are:

<u>Institution</u>	<u>Approximate Enrollment</u> <u>(Fall 1975)</u>
Mississippi State University	10,200
University of Southern Mississippi	7,900
University of Mississippi	7,400
University of Mississippi Medical Center	1,400
Jackson State University	5,200
Alcorn State University	2,700
Mississippi Valley State University	2,700
Mississippi University for Women	2,300
Delta State University	2,200
Gulf Coast Research Laboratory	
Mississippi Research and Development Center	

Each of these institutions enjoys substantial autonomy in conducting its day-to-day affairs as long as conformity to the broader policies of the Board of Trustees is maintained. The Board of Trustees' permanent staff of approximately 20 is located in the capital city of Jackson.

Description of Public Service Programs

Commitment

Without exception, Mississippi's institutions of higher learning share a philosophy and orientation which is basically favorable to the concept of providing assistance to state government. This is a necessary but not a sufficient condition to insure an aggressive assistance effort. University differences in terms of concrete offerings of assistance appear to hinge largely on their different role concepts and their resource base. Some universities view themselves as public institutions with a very broad commitment to public service in many areas other than teaching and academic research. Generally, these schools have the kinds of resources that could be valuable to state government. These conditions--broad public commitment and a substantial resource base--seem to reinforce each other.

Other institutions view themselves primarily as centers for academic teaching and research, placing less emphasis on public service roles such as direct assistance to state government. These institutions tend to have a narrower range of resources that could be used to serve state government. These two conditions, also, probably reinforce each other. Thus, two broad patterns of commitment and resources seem to exist in Mississippi.

In both cases, however, services are typically offered only after a specific request has been made by a unit of state government. Aggressive and active seeking out of governmental needs where university assistance might be provided to state government tends to be the exception rather than the rule. This is not the case, however, with the Research and Development Center and the Gulf Coast Research Laboratory which actively search for ways to assist state government over a broad range of activities.

Evolution of public service programs

Most of the outreach operations of the universities have come about as the result of problems and conditions that are unique in each case. For example, outreach operations at Mississippi State University undoubtedly have been influenced by that institution's designation as a land-grant school. Other university programs have developed as the result of particular government needs, requests and historical factors. Institutions in the system which maintain a non-teaching emphasis (e.g., the R and D Center and the Universities Marine Center) have similarly evolved out of unique historical conditions such as special governmental needs.

Coordination

At the system level, the Board formally coordinates various institutional activities, although it allows considerable autonomy and discretion at the institutional level. It also provides a channel for liaison among institutional programs and between institutions and state government.

At the institutional level, liaison and coordination mechanisms vary. In some cases, the president's office acts as the sole channel for coordination and liaison. In other cases, where outreach efforts are well developed, the president has delegated liaison and coordination responsibilities to personnel in other divisions of the institutional hierarchy. For example, at one institution the director of Continuing Education and the director of the Law Enforcement Education program provide coordination and liaison for services dealing with law enforcement.

Nevertheless, systemwide liaison and coordination are responsibilities of the Board of Trustees. At each institution, the chief administrative officer--the president--is responsible for providing coordination and liaison for outreach programs. The president is often the primary contact between his institution and government units, particularly during initial negotiations, although informal contacts and program development sometimes lead to direct relationships between university faculty and government officials without direct involvement of the president's office.

Major public service units

The main service units providing services to state governments are the Mississippi Research and Development Center, the Gulf Coast Research Laboratory, the Special Projects Division of the University of Mississippi, the Bureau of Governmental Research of the University of Mississippi, the Cooperative Extension Service of Mississippi State University, the Universities Marine Center Consortium, and the Universities Consortium for Alcohol Abuse and Alcoholism.

Within recent years, the state and the Board of Trustees have created, respectively, institutions and programs with substantial outreach orientations. Since none falls clearly under the definition of an autonomous university or under the auspices of any one university, they are treated here in a separate discussion.

In two particular substantive areas, Board action has led to inter-university cooperative programs through the creation of specialized structures which provide services to various state governmental units. In 1969, the Universities Marine Center Consortium was established to submit and manage proposals for projects relating to the Sea Grant program, and to be the recipient and project coordinator for any grants received. This activity is centered at the Gulf Coast Research Laboratory in Ocean Springs and is managed by representatives from the University of Mississippi, Mississippi State University, Mississippi University for Women, and the Gulf Coast Research Laboratory.

In 1972, a similar type of Board action created the Universities Consortium for Alcohol Abuse and Alcoholism which is presently located at the Universities Center in Jackson. Its purpose is to undertake research, evaluations, and to serve in the total area of alcohol abuse and alcoholism.

Both of these organizations have developed good relationships with state governmental units and agencies which have direct interests in these topics. Each organizational unit has its own staff but also calls on and works closely with the staffs of the institutions within the consortium.

The state has also created two institutions and placed them under the Board's control. Both have substantial outreach orientations and assist state government in a variety of ways.

The Gulf Coast Research Laboratory, established in 1950, teaches and administers both undergraduate and graduate courses and programs in marine resource areas for all of the state's universities which have related degree programs. It also conducts basic and applied research and maintains close working ties with other state government units. This connection is encouraged through special structural arrangements. Its director, for example, serves by law as a member of the Mississippi Marine Resources Council, and its assistant director serves as a member of the Mississippi Marine Conservation Commission. The staff of the Laboratory frequently serves in a consultant capacity to these and other state agencies. The Laboratory has made certain university services more accessible to state government, particularly in the marine research area.

The Mississippi Research and Development Center was created by an act of the state legislature in an effort to stimulate the economic development of the state through research and technical services. The law states that the R and D Center "shall advise the various agencies and departments of state government regarding internal research needs and programs." It further provides that "communities, counties, special-purpose districts, multi-county area groupings and other such organizations may call upon the center for development of extension services and informational services."

The intent of the legislation that created the R and D Center was to reorganize and expand the availability of research capabilities to state government as well as other groups in the state in need of research assistance. Moreover, it was intended that the R and D Center would be a means of minimizing the duplication of effort and better utilizing the existing research

capabilities in both state agencies and institutions of higher learning. It was felt that these objectives could be accomplished by associating the state research agency (the R and D Center) closely with the academic community without placing it under the administration of a single institution. In addition to having the capability of drawing on university research expertise, the Center was empowered to hire its own professional staff, purchase needed equipment and to build its own facilities.

In effect, the Mississippi Research and Development Center is an agency of state government under general management of the Board of Trustees of State Institutions of Higher Learning, which is responsible for general budgeting and accounting. Yet the operations of the Center are guided by an advisory council, called the Mississippi Research and Development Council, with strong representation from state government. The governor appoints two members. Also, the Board includes two members of the House of Representatives, two members of the Board of Trustees of State Institutions of Higher Learning, and two members of the Mississippi Agricultural and Industrial Board. The governor appoints the remaining 5 members of the Council.

Although the Board of Trustees of State Institutions of Higher Education appoints and employs the director of the Center, such appointment is subject to the approval of the Council. Thus, the R and D Center is a unique entity which is under the general administrative control of higher education but whose allegiance is primarily to state government.

The University of Mississippi and Mississippi State University maintain better funded and more elaborate comprehensive outreach activities than other units of the university system. The University of Mississippi operates the Bureau of Governmental Affairs under its political science department. This group provides quadrennial short courses for legislators, reorganization and constitutional studies, consultations and numerous publications of topical interest. Its Division of Special Activities works with a variety of state governmental units in the development, coordination and logistical aspects of special conferences, institutes, workshops and short courses.

Mississippi State University's Cooperative Extension Service provides services which are similar in some respects to those provided by both the Bureau of Governmental Affairs and the Division of Special Activities at the University of Mississippi. Administratively, all three programs enjoy a substantial degree of autonomy. Coordination is usually handled by the head of each program and by the president's office of the responsible institution.

Some of the state's other schools have developed outreach programs in selected areas. For example, the University of Southern Mississippi frequently supplies consultation and loans experts in the field of criminal justice to state government. In such cases, administration and coordination are typically handled by faculty with expertise in their respective areas, or by department heads, division heads or deans, who customarily do so with the tacit or formal approval of the institution's president. At the other end of the spectrum are schools which have developed little or nothing in the area of outreach programs.

Administration

Among the universities, wide variations exist in the extent to which each school has developed specialized administrative structures to handle institutional outreach programs and activities for state government. Some, for example, have little or no specialized administrative structures, while others have limited structures for these operations, or assign these responsibilities to existing structures and personnel. Still others have developed major, discrete administrative structures which are heavily involved in outreach operations in specific substantive areas. The major outreach operations tend to be centered within the state's larger institutions.

Regarding all outreach efforts, two observations may be made. First, none of the state's universities seem to have extensive and specialized school-wide structures (other than the president's office) which administer and coordinate all outreach programs. Most schools, however, have special offices, or administrative personnel, who handle internal research programs supported by outside contracts and grants, but such programs typically provide little coordination for outreach programs or activities which involve state governmental units. This is not to suggest that the presidents do not do a good job; rather it is simply to state that specialized and extensive administrative structures for coordination of public service activities do not exist at any school.

Second, where outreach operations exist, they tend to be in specialized substantive areas such as education, criminal justice and medicine, although some operations (e.g., the Bureau of Governmental Research, the Division of Special Activities, and the Mississippi Cooperative Extension Service) are capable of providing rather broad offerings to state government. In the case of outreach efforts in specialized, substantive areas, coordination and administration are typically handled at or near the academic department level where the expertise lies. In the case of broader and more organized outreach efforts, such as the R and D Center, administration is handled through specialized structures.

Kinds of services provided

Consultations, studies, analyses, special course offerings or training programs, and use of campus facilities (e.g., computer, meeting space) appear to be among the most frequently provided services by universities. The particular level and type of services provided to state government varies widely among the institutions.

The range of services and research provided by the Mississippi Research and Development Center, however, is virtually unlimited. They include planning services, advisory services and numerous specific forms of applied research. A selected list of projects and the state units for which they were provided is presented in the following section.

Users of university services

Governmental units receiving services include the state legislature and its committees, the governor's office, the court system, numerous state agencies, county governments, municipal governments, and special district units.

In 1974 the legislature indicated an interest in more effective utilization of university resources and expertise in the form of consultation and testimony. Upon the request of the state legislature, the Board of Trustees of State Institutions of Higher Learning (the governing authority for the state's public universities) compiled a "Legislative Resource Personnel" handbook containing the names and relevant background information on selected faculty and staff throughout the state's higher education system. These experts are grouped in the handbook by institution and by field of expertise. No information is currently available on the extent to which the handbook has been used by the legislature in locating and using the persons listed. It is known, however, that the legislature has been the recipient of other services, including technical publications, training and awareness seminars, and short courses.

The judicial arm of state government has called on state universities intermittently for assistance. The attorney general's office, for example, has been one of the prime beneficiaries of university assistance.

Data are not available concerning the extent to which the governor has relied on university assistance. It is known, however, that several units within his office (e.g., the Governor's Office of Education and Training) have made use of university services. Also, a substantial number of state agencies have benefitted from university assistance and services.

A partial list of state agencies that have received university services during recent years includes the Department of Agriculture and Commerce, Commission on Budgeting and Accounting, the State Highway Department, the Department of Public Safety, Pearl River Basic Authority, the Library Commission, the Employment Security Commission, the Insurance Commission, the Public Service Commission, the Department of Mental Health, the Criminal Justice Planning Division, the Penitentiary Board, the Probation and Parole Board, the Pharmacy Board, the State Tax Commission, the Board of Water Commissioners, the Board of Public Welfare, LEAA, Mississippi Research and Development Center, Governor's Office of Education and Training, the Department of Education, the Attorney General, Educational Television, and the Mississippi Workmen's Compensation Commission.

A list of selected projects conducted by the R and D Center for agencies of state government is presented below:

Statewide Education Study for Legislature
Statewide Telecommunications Study for Governor's Office
Statewide Transportation Study--Self-initiated, with universities
State Bar Economics Study for State Bar
Cash Flow Models for State Treasurer, Highway Department
Econometric Model--Self-initiated (used by Budget and Accounting Commission)

Management Seminar for State Parks Department
 Job Evaluation System for ETV
 Computer Services for University Medical Center and numerous
 state agencies
 Graphic Arts Services for ETV, Universities Center, College
 Board
 Federal-State Technology Transfer Workshops for all state
 agencies
 Public Administration Assistance for Governor's Office, Budget
 and Accounting Commission, House Appropriations Committee,
 Federal-State Programs Office
 Manpower Development for Vocational Rehabilitation Division
 License Application Assistance for Superport Coordination Office
 Facility Feasibility Studies for Port Authority
 Energy Operations Impact Analysis for Marine Resources Council
 State Comprehensive Outdoor Recreation Plan for Parks Department
 Court Case Load Analysis for Lee County Bar
 Federal Revenue Sharing Information to Local Governments
 Fuel Conservation and Cost Reduction Project for Governor's Office
 General Support for Governor's Emergency Council
 Planning and Advisory Services for Archives and History Department
 Improved Bond Rating Assistance for State Treasurer

Methods of financing

Methods of financing services to state government vary widely among universities and colleges in the state. Many universities attempt to absorb as much of the cost of services to state government as possible, depending upon the extent of need, the availability of staff and faculty personnel, the time required, and immediate budgetary and resource limitations.

Typically, matters of minimal involvement (e.g., telephone or written correspondence consultations and use of campus facilities for meetings) involve no charges; the institution absorbs the costs. In cases where substantial involvement is concerned (e.g., extensive faculty travel, major equipment or supply purchases, and long-term personnel commitment) the institutions may require the relevant governmental unit to pay a substantial portion of the costs. Even in these cases, however, the institution typically absorbs at least some of the overhead costs and may offer some services such as computer time at reduced cost.

In short, no systemwide policy exists concerning the form of arrangement or cost. Each project is approached on a case-by-case basis. All things being equal, the non-teaching units of the higher education system (e.g., Mississippi Research and Development Center, the Mississippi Cooperative Extension Service, the University of Mississippi's Bureau of Governmental Affairs and its Division of Special Activities) appear to have been set up to absorb a greater share of the costs of services to state government than the teaching-oriented units of the higher education system. Where federal or other outside funds are available, they are used to finance outreach activities.

Policies and procedures

Uniform policies and procedures do not exist among institutions of higher education with regard to the frequency and extent of services provided, overhead policies, consulting policies, extra compensation and release time for faculty, or the extent to which public services provided by faculty members count toward promotion and salary adjustments.

A uniform ruling covering channels of communication between agencies of state government and university system units does exist. The Board of Trustees ruling in 1973 states that all requests from government agencies and elected officials shall be channeled through the Board of Trustees of State Institutions of Higher Learning. Moreover, the bylaws of the Board require that all relationships and negotiations between the state legislature and institutions of higher learning shall be carried on through the Board of Trustees.

SECTION V--NORTH CAROLINA

The Setting

The University of North Carolina has a history of close affiliation with state government. Beginning with President Frank Graham and continuing with President William Friday, each head of the University of North Carolina has been closely associated with the state's political structure. The governor of the state served as Chairman of the Board of Trustees of the Consolidated University as long as that system was in existence. It was not until the restructuring of higher education in 1972 that the governor was removed from direct responsibilities in the governance of higher education.

Public higher education in North Carolina has not only been close to state government philosophy--it has created organizations for insuring a continuing close interaction. The Institute of Government at the University of North Carolina at Chapel Hill, for example, was created in 1931. Today, it is considered to be one of the most effective institutions of its kind in the country. This organization maintains a continuous relationship between state government and the University of North Carolina. It facilitates communication, the absence of which so often is viewed as a major obstacle to effective university/state government relations.

In addition to institutions such as the Institute of Government, whose primary mission is to serve state government, there are numerous institutes and centers within the University which focus on interfacing basic academic programs with organizations of state government. These institutes and centers act as brokers and/or facilitators in bringing these institutions and agencies together--

Some of the more traditional organizations within the University also provide public services on a continuing basis to state government. These include such organizations as the schools of engineering and life sciences at North Carolina State University, the Division of Health Affairs at the UNC at Chapel Hill and schools of education at all institutions within the University. Each of these organizations or agencies has contractual relationships with various agencies of state government.

Significant features of state government

North Carolina is viewed as a state with a strong legislative branch. The state has a bicameral legislature with 50 members in the Senate and 111 members in the House of Representatives.

There are some who think that the governor of North Carolina is weak because of the absence of veto power. The effectiveness of the governor, however, stems from his tremendous appointive powers and influence over the budget. About 2,000 appointive positions in state agencies are filled by each incoming administration. North Carolina is one of the few states with a full-time lieutenant governor with a salary in excess of \$30,000 per year and a full staff complement.

Traditionally, the state has relied heavily on advisory boards and commissions. Some of these boards have regulatory powers. There are numerous organizations, such as the Utility and Industrial Commissions, which have a full slate of paid officers.

A reorganization act for state government was passed in 1970 which reduced the number and the power of many of the advisory boards and commissions within the state. There is a trend at the present time toward concentration of more power in the secretaries of the various agencies of state government.

The number of state agencies and organizations whose head answers directly to the governor was reduced to about 25 with the reorganization act. This increased the capacity of the governor to manage an increasingly complex set of state programs.

The governor of North Carolina has a cabinet (council of state) consisting of the secretaries or heads of the various agencies of state government. He appoints nine of these. The others (10) are elected by popular vote, as required by the state constitution.

North Carolina is one of the few states which provides continuing technical services to local governments throughout the state. There is a Commission on Local Government which operates under direction of the secretary of the treasury. The commission is concerned with all aspects of administration of local government, but principally with matters relating to finance.

Structure of higher education

The legislature in 1971 passed an act which restructured all senior public higher education in North Carolina (H 1456). Considerable attention has been devoted since its passage to implementing the various provisions.

The restructuring act placed all of senior higher education under a Board of Governors. The University of North Carolina, which functions under this Board of Governors, has sixteen constituent institutions. Each of these institutions has a Board of Trustees with powers as delegated by the Board of Governors.

The Board of Governors is charged, not only with the administration of all institutions of public higher education, but with interfacing and coordinating with the Department of Community Colleges and all private higher education. In this context the Board of Governors and the administration of the University of North Carolina is the central focus for planning, coordination and administration of all higher education in North Carolina.

Institutions offering college level work are scattered throughout the state. There are 16 public senior colleges which comprise the University of North Carolina, 41 private institutions, 17 community colleges and 57 technical institutes.

Description of Public Service Programs

Within the structure of higher education there are numerous organizations which have as their basic function the delivery of public services to various public groups within the state. The primary clients for these services include state and local governments.

Major public service programs

The major organizations within the University for the delivery of public services are the continuing education divisions. There is a continuing education division or comparable organization operative in each of the sixteen public higher education institutions. Each community college and technical institute also has a central office responsible for delivering public services. Nine of the institutions of private higher education have a central organization unit for administering these programs.

In addition to general organizations (e.g., continuing education divisions which provide services to state government) there are many specialized programs. These programs are often organized as institutes or centers to provide services helpful in decision making. Some of the larger interinstitutional institutes or centers include:

- The Water Research Institute
- The Urban Studies Program
- The Environmental Studies Center
- The North Carolina Highway Safety Research Center
- The Institute of Nutrition
- The Office of Marine Sciences
- The Alcoholic Rehabilitation Center
- The Social Science Research Center
- The Triangle Universities Center for Air Pollution
- The International Studies Program

These institutes and centers were created to give special attention to problems of great concern to people and to leaders in government at all levels. They represent windows to the University whereby state officials and others who need information and services can find a focus.

List of all public service units

A larger list of institutes and centers which exist within the University of North Carolina is presented in Table 1.

All of the programs of public service to state and local government are coordinated to some extent through the office of the president or by the general administrative offices of the University of North Carolina. This office includes a vice president for research and public service programs whose primary mission is to insure that the research and public service programs of the overall university are being administered effectively.

University outreach to state government

Commitment. The general philosophy of the University of North Carolina is that it has an obligation to serve the interests of state government to the maximum extent possible. A commitment to this general philosophy is illustrated by the creation of the Institute of Government and its concept of operation. This and the numerous other institutes and centers serve as a continuum which provides not only direct services but the linkages by which other resources of the University may be used more effectively.

Table 1

INSTITUTES AND CENTERS WITHIN THE UNIVERSITY OF NORTH CAROLINA, 1973

Institution	Institute or Center
North Carolina State University	Agricultural Experiment Station Highway Safety Research Center Institute of Nutrition Marine Science Council Triangle Universities Computational Center Triangle Universities Consortium on Air Pollution Triangle Universities Nuclear Laboratory Water Resources Research Institute Center for Urban Affairs and Community Services Center for Rural Resource Development Southeastern Plant Environment Laboratories Center for Occupational Education Engineering Design Center Engineering Research Services Division Center for Marine and Coastal Studies Furniture Research and Development Application Institute Minerals Research Laboratory Pesticide Residue Research Laboratory Reproductive Physiology Research Laboratory Institute of Statistics
UNC Chapel Hill	Highway Safety Research Center Institute of Nutrition Marine Science Council Triangle Universities Computational Center Triangle Universities Consortium on Air Pollution

Table 1 (Continued)

INSTITUTES AND CENTERS WITHIN THE UNIVERSITY
OF NORTH CAROLINA, 1973

Institution	Institute or Center
UNC Chapel Hill (continued)	Triangle Universities Nuclear Laboratory Water Resources Research Institute Carolina Population Center Center for Urban and Regional Studies Child Development Institute Health Services Research Center Institute of Latin American Studies Institute of Marine Sciences Institute of Outdoor Drama Institute for Research in Social Science Materials Research Center L. L. Thurston Psychometric Laboratory Social Research Section, Division of Health Affairs Research Laboratories of Anthropology Laboratories for Reproductive Biology Institute for Speech and Hearing Sciences Center for Alcoholic Studies Dental Research Center
UNC Greensboro	Agricultural Experiment Station Institute of Nutrition
NC Agricultural and Technical State University	Agricultural Experiment Station Institute for Research in Human Resources Manpower Research and Training Center Transportation Institute
UNC Wilmington	Marine Science Council Water Resources Research Institute Institute of Marine Biomedical Research
East Carolina University	Marine Science Council Water Resources Research Institute Institute for Coastal and Marine Resources
Duke University	Triangle Universities Computational Center Triangle Universities Nuclear Laboratory
North Carolina Central University	Minority School Biomedical Support Program Institute of Desegregation

Table 1 (Continued)

INSTITUTES AND CENTERS WITHIN THE UNIVERSITY
OF NORTH CAROLINA, 1973

Institution	Institute or Center
UNC Charlotte	Institute for Urban Studies and Community Service
Western Carolina University	Economic Development Center

Kinds of services. Some of the major services to state government provided by the Institute of Government include:

the publication of a legislative calendar on a daily basis during the time the legislature is in session;

staffing various commissions or committees that are created by the legislature to study special problems during and between sessions;

conducting special studies on issues of particular concern to the legislature on short notice;

conducting training programs for state government officials, including the legislature. For example, an annual intensive training session is held for new legislators before they take office.

In addition to the Institute of Government, the School of Medicine has numerous contractual relationships with the Department of Health and other agencies which require services of various professionals within the School of Medicine.

This same kind of relationship exists between the School of Engineering at North Carolina State University and the Highway Department. The School of Engineering for many years had a continuing contractual relationship to provide basic and applied research relating to the problems of highway and bridge construction.

Linkages

There has been an understanding between the State Department of Agriculture and the School of Agriculture and Life Sciences for many years regarding their roles within the state. The School assumes the research and

educational role with respect to all problems associated with agriculture, and the Department of Agriculture assumes a regulatory role. These two organizations obviously must cooperate on a daily basis.

The office of Marine Sciences and the office of Sea Grants are working closely with the state Coastal Zone Management office in administering the new legislation recently adopted at the federal and state levels. The office of Sea Grant programs works closely not only with the office of Coastal and Marine Affairs but with the entire department of Natural and Economic Resources, which includes the Commission on Commercial and Sport Fisheries.

The Water Research Institute is linked very closely to state government. The division of Air and Water Resources depends on this agency almost entirely for an annual ground water inventory and research on all problems relating to water resources in the state.

In recent years the Urban Studies program has assisted many agencies of state government with problems relating to urban and regional development. Studies are conducted jointly with agencies of state government. Conferences, such as one recently planned on growth management and urban mass transit, are jointly sponsored with the Legislative Research Commission.

These programs have evolved over the years through the joint efforts of the University and state agencies. A landmark in the development of some of the more viable services was the creation of the Institute of Government at the University of North Carolina at Chapel Hill.

Administration

Another major landmark in servicing state government was the establishment of a position of vice president for public services within the consolidated University of North Carolina. This position, established in 1967, called attention to the interlocking of the University with state government agencies. This action, in turn, resulted in the creation of officers with similar titles on each of the major campuses within the state.

When the new structure of the University was created, the position of vice president for Research and Public Services became part of the basic structure of the president's administration. This office has responsibilities for interfacing and coordinating all research and public services, particularly relating to needs of state government. The position is currently filled by an associate vice president for Research and Public Services.

In addition to the institutes, centers and other major organizations which have the charge of providing services to state government, many other services are provided directly by individual faculty members. These contributions by faculty are made through service on boards and commissions and through various forms of consulting. Also, many technical committees, on which university faculty are represented in great numbers, have been created by various agencies of state government to advise on specific areas of concern.

Faculty involvement

A major contribution of the University to state government is in the form of faculty who work with state agencies and organizations on a leave of absence basis. Over the years, numerous high level government officials have taken leave from the University to serve state government for specific periods. For example, during the administration of Governor Robert Scott, the vice chancellor for public services at North Carolina State University served as Secretary of Administration. At the present time the state budget director is on leave from the Institute of Government.

Alternative methods of financing

Most of the organizations and institutions within the university which serve state government have some appropriate funds for that purpose, generally known as "hard" money. The Institute of Government, for example, operates with very little soft money. Presently (1975), that organization has 20 professionals on the faculty and a hard money budget of nearly one million dollars annually for service to state government.

Many of the other institutes which serve state government have a more limited hard money base, deriving substantial support from contracts and grants. In some instances, state agencies have funds to pay for their services and, in other instances, the institutes and centers assist in acquiring grants from federal agencies or from foundations to assist in servicing the state government organizations.

There are a few programs within the University where small grants are made available from the state on an annual basis for developing projects which usually can attract soft money from outside sources. These include the Urban Studies program, the Environmental Studies program and the Marine Sciences group.

When contracting with state agencies to carry out various kinds of services, the person initiating the action is expected to get prior approval from the originating institution and from the general administration of the University. Many agencies of state government regularly purchase services from the state's institutions of higher education.

Policies and procedures

Criteria for service. The basic criteria governing the kinds of services or contracts in which the University can engage were recently identified in a document prepared by the University of North Carolina general administration, Sponsored Research Within The UNC: Administrative Procedures. All proposals for sponsored research should meet the following criteria.

Be the type of research appropriate for the University as opposed to other research institutions;

Be rigorously designed, consistent with traditional standards of academic excellence;

Be subject to full disclosure with respect to purpose and sponsorship;

Be free of restraints with respect to dissemination of results except under special circumstances approved by the President;

Permit the University to exercise administrative control and responsibility;

Have a research budget adequate for the proposed work, including contingencies.

Overhead policies. The overhead policies of the University are not uniform with respect to each institution. However, the general policies which govern the amount and use of overhead follow.

1. General administrative cost based on total current fund expenditures that serve all missions of the University. A time allocation system is developed to estimate the equitable portion for organized research.
2. Departmental administrative costs for organized research are salary portions based on accounting records, time allocation studies and the cost of other research services provided by the department which cannot be directly identified with specific research projects.
3. Research administrative costs are those incurred by a separate organized entity to manage research activities relating to professional, technical and fiscal matters of grants and contracts, personnel administration, refereeing, editing and publishing of research reports, and provision of research services not identifiable with a specific research project.
4. Building and equipment costs are based on a fixed use charge or depreciated over an estimated useful life. Space assignment and utilization records along with accounting records are maintained to allocate use or depreciation cost.
5. Plant maintenance and operations costs are supportable by accounting records and by data on the intensity of use as related to research.
6. Student service costs are apportioned on a classification of the population served or based on the amount of student employment in the research mission.
7. Library costs are identified by isolating the type and amount of support provided research-related faculty.

Consulting policies. The general consulting policy of the university was recently clarified as part of a study of sponsored research. The basic components follow.

1. Consulting activities which enhance the faculty member's value as a teacher or researcher and which are related to the missions of the University are considered appropriate.
2. A consulting obligation should be undertaken only if it does not interfere with full and complete performance of the regular duties to which a faculty member has been assigned, for which he is receiving compensation from the UNC, and which is normally expected of full-time faculty members.
3. Duties which a staff member should reasonably be expected to perform as a public service by virtue of his position on the faculty should be carried out without extra compensation.
4. In keeping with the exercise of high levels of professional integrity, faculty members undertaking positions as consultants must in no way compromise the position of the University through their consulting activities. Both the fact and the semblance of a conflict of interest must be avoided.
5. If a request for assistance involves the substantial use of the University's labor, facilities or equipment, it should be performed on a contractual basis with the University, rather than on a consulting basis with an individual faculty member.
6. When a faculty member works in a private capacity, he should make it clear to those who employ him that his work is private and unofficial. The specific arrangements and compensation rates for such consultations should not subject other professional persons outside the University to unfair competition.
7. The department head or other appropriate person must be informed in advance of accepting a consulting assignment as a basis for improving understanding and communications and for avoiding inappropriate consulting responsibilities. It shall be the responsibility of the chancellors to exercise the necessary control and supervision of consulting activities. At the end of each calendar month, each faculty member shall inform his dean, through his department head, of the amount of time spent in consulting during the previous month. The dean will report to the chancellor.

Overload and released time. There is no general overload policy which relates to all institutions within the University. Some institutions permit faculty members to earn up to 20 percent of their regular university salary from continuing education activities. There are usually no limits on outside earnings with respect to research or consulting activities. There is a limit, however, with respect to time.

Released time of the faculty to perform services is not a matter of general policy. In each instance where released time is needed to perform a specific task, it is evaluated by the appropriate officials of the University. The basic criterion for approval is whether the released time will contribute to the advancement of the individual's ability and/or add to the ability of the University to carry out its mission. The contribution that may be made to society or the state is also given its proper weight.

Faculty advancement. There is no standard policy which establishes the extent to which outreach activities count toward faculty promotion or salary increases. These activities are evaluated on their merits in terms of how much they contribute to improvement in the ability of the faculty involved to carry out their basic responsibilities to the University.

To the extent that public services are a part of an individual's assigned responsibilities, they are considered differently. For example, North Carolina State University awards extension professorships. Although each member of the faculty is expected to do scholarly work and publish in various journals in order to be properly evaluated by his peers, consideration is also given to the contribution made to society through public service.

Service agreements. Each year, numerous service agreements and contractual arrangements are made between the University and various agencies of the government. Many of these are made with public schools throughout the state. There are also many arrangements with the community college system.

There are no free services offered by the regular academic departments on a sustained basis. Some units such as the Institute of Government, however, have been funded by the legislature and, therefore, are equipped to provide services without additional funds. This is also true of such organizations as the Agricultural Extension Service and the Industrial Extension Service.

General Assessment

The system of delivery of public services to state government is satisfactory in North Carolina. The institutional structure that exists provides continuity in programming to meet most of the continuing needs of the state. The North Carolina approach permits the University to respond effectively with respect to the timing and quality of product. There are

numerous faculty who desire to respond to state agencies' needs, and will, if the institutional structure exists to use them effectively. The major problem is the inherent inflexibility of faculty members who are committed full-time to teaching and research in areas that may not be related to state government. It is often difficult for them to break away for short-range demands of state agencies and organizations.

The ability to respond to the immediate needs of state government could be improved through different funding arrangements. For example, a certain amount of funds might be allocated to general administration of the University to be administered through the Continuing Education and Research councils. These funds then could be made available to individuals and/or departments within the University which desire to work on specific problems of direct interest to state government.

It has been suggested that a special program be created by the University to serve the continuing needs of the major agencies of state government. Such a program would provide continuing research relating to the missions and goals of these agencies and organizations. Research and training programs would be designed to help develop strategies and programs through which various agencies could accomplish their objectives. The University would provide appropriate back-up training, drawing upon all disciplines and ongoing programs to serve state government.

SECTION VI--TENNESSEE

The Setting

Two systems of higher education

The state of Tennessee has two systems of public higher education: the University of Tennessee System and the State University and Community College System of Tennessee. The latter is also known as the State Board of Regents System.

The oldest of these is the University of Tennessee. Although organized as a system in 1968, UT dates from the founding of Blount College in 1794, two years before Tennessee was admitted as the sixteenth state in the union.

Established in 1972, the State University and Community College System includes six senior institutions and 10 community (two-year) colleges. Legislation authorizing the establishment of the four-year universities was passed in 1909, and the first two institutions opened in 1911. The first three community colleges were authorized in 1965.

As the newer of the two systems, the Board of Regents institutions have chosen not to duplicate the public service organization created within the University of Tennessee. Instead, each institution has established its own public service mission to meet the needs which it has identified, generally within its local service area, except for the larger and older institutions such as Memphis State University.

Particularly noteworthy in the future is the public service potential of the community colleges. With their technically-oriented academic programs and their commitment to serving community needs, these two-year institutions should become a significant part of public higher education's service mission at the local level in the years ahead.

The remaining discussion focuses primarily on the public service activities of the University of Tennessee.

The UT System commitment

The University of Tennessee is the state university and federal land-grant institution. More than 47,000 students are enrolled at its primary campuses in Knoxville, Chattanooga, Nashville, Martin and Memphis.

Because of its land-grant designation, the university has been committed to a major public service mission for many years. Its Agricultural Experiment Station was established by federal law in 1887 and its Agricultural Extension Service in 1914. Extension leaders located in each of Tennessee's 95 counties help farmers solve many of their problems by translating the latest knowledge derived from research into practical terms which can be understood and implemented.

Another traditional public service component of public higher education is the system of health-related colleges. Since it became a part of the university in 1879 and was moved to Memphis in 1911, the UT Center for the Health Sciences has been a vital part of the institution's public service effort. Faculty and students of the Center serve as staff for the City of Memphis hospitals and annually provide essential health care for more than 250,000 medical indigents in the midsouth area.

Non-agricultural public service at the University of Tennessee has expanded greatly during recent years. During the past 26 years, it has evolved from one full-time agency with three staff members to an organization of more than 80 professionals providing assistance to officials of state government, cities, counties, and businesses and industries.

Backing up these full-time staff members and also providing assistance on an individual basis are the faculty on the University's five primary campuses. Collectively, they represent a public service resource unequalled and unduplicated elsewhere in the state.

Description of Program

Definition and purpose

The University of Tennessee defines public service as one of the three primary missions of the university. Excluding those services rendered through its agricultural and continuing education programs, public service consists of professionally-based activities of faculty, staff and students, such as

technical and management assistance;

problem-solving applied research conducted at the request and for the benefit of a client;

cultural enrichment for specific audiences via the performing arts;

noncredit job-related training;

information and data dissemination services;

demonstration projects.

Such activities are undertaken to help government, business, industry, professional and community groups, educational institutions and individuals to identify and solve practical problems or take advantage of opportunities for improvement.

This definition excludes: (1) services unrelated to professional expertise undertaken in a "citizenship" role, such as most church or PTA advisory board memberships; and (2) services to the University of Tennessee which are part of normal faculty and staff work.

The University views public service as an integral part of its total obligation to Tennessee taxpayers. In general terms the purposes of the University's public service mission may be stated as follows.

Excellence in teaching and in research to develop new knowledge are the primary goals of the University. As such, teaching and research determine what a university is and how it should proceed. Public service is also a primary goal and even an indispensable adjunct to teaching and research in a state-wide land-grant institution, provided its purposes are consistent with and contribute to fulfillment of the university's teaching and research mission. The purposes of public service at the University of Tennessee are:

1. To use the storehouse of knowledge uniquely embedded within a university to serve man and his environment by contributing to solutions of his immediate problems and by enhancing his ability to identify and realize opportunities;
2. To enhance the teaching and research missions of the University by providing convenient professional access to and from the community at large;
3. To provide professional continuity through a permanent institution as appropriately required by the ebb and flow of public activities within the community at large;
4. To help provide alternatives for public choice;
5. To open to professional faculty and staff and to students a range of opportunities to transfer their expertise to the public benefit; and
6. To interpret the University to the public through performance.

Early development in non-traditional service

In the 1920's, officials of the University and of state government recognized the benefit which the state could derive from being able to call on personnel in the finance department of the institution. As a result of this agreement, the University designated one public finance professional to work with the state and thus established one of the first examples of non-traditional public service in an institution's history.

From that beginning similar agreements have been reached to make UT personnel available to help the state, recognizing that the University has significant academic capability and that the institution can be only as strong as state government. In addition, the state and/or the University have established several full-time agencies to provide assistance to specified client groups.

Since that first step in the 1920's, however, one factor has characterized the development of Tennessee's non-agricultural public service organization. Officials of state government, including both the governor and the state legislature, have recognized the value of academic personnel and have utilized this technical assistance resource whenever possible.

First full-time public service agency

In 1949, the Tennessee General Assembly created the Municipal Technical Advisory Service (MTAS), the first full-time, non-agricultural public service agency at the University. MTAS was established at the request of officials of cities throughout the state and was designated to work very closely with the Tennessee Municipal League, the organization representing those officials.

MTAS has evolved from an agency with only three professionals when it began to 27 staff members in 1975. During the past year, its staff completed work on 622 projects, made 2,107 field visits to cities, responded to 711 reference questions, and provided 239 ordinances and 1,548 other materials.

Assistance is provided in areas such as finance and accounting, municipal law, engineering and public works, law enforcement, personnel administration and general municipal matters.

When the General Assembly created MTAS, it recognized the need for a partnership between state and municipal governments, through the University, to provide these needed services. Consequently, a portion of the MTAS budget is paid by the state, with cities also sharing the cost.

Other program developments

Fourteen years passed between the creation of MTAS and the establishment of the second university-based public service agency. During this period, the level of assistance requested by the state continued to increase, and the University became more involved in providing help to the state.

In 1963, the level of services being provided reached such a point that a central office was needed at the University to coordinate state requirements with the UT resources.

To fulfill this role, the General Assembly established the Government-Industry-Law Center (GILC) giving it a broad public service mandate covering not only assistance to government, but also to business and industry. GILC's mandate was transferred in 1974 to the Institute for Public Service, and GILC, which had been a focal point for state service for many years, was abolished.

Also, in 1963, the Legislature created a third public service unit, the Center for Industrial Services (CIS), to provide the assistance required by existing businesses and industries in Tennessee. This past year, CIS completed more than 652 projects covering a variety of subjects.

In 1966, the Governor asked the University to establish an agency to coordinate training and career development courses for employees of state and local governments. UT responded to the request in 1967 by establishing the Center for Government Training (CGT). Since that time, more than 87,000 government employees have received approximately 1,275,000 man-hours of job-related instruction.

In 1973 the General Assembly created the fourth primary public service agency, the County Technical Assistance Service (CTAS). Responding to a request from officials of the state's counties, the legislators established CTAS to provide services to local governments similar to those being provided for municipalities by MTAS. CTAS has provided assistance on more than 5,000 requests in less than two years.

During the same decade, the University also established three other public service agencies which are either partially or entirely funded by the federal government and which have limited missions. They are:

Civil Defense Education Program (CDEP)--created in 1963 to help local officials prepare for nuclear attack, but now concerned with emergency preparedness;

State Agency for Title I, Higher Education Act of 1965--established at UT in 1966 at the request of the Governor to administer the program which encourages colleges and universities to become more involved in community service;

Technical Assistance Center (TAC)--created in 1970 to help stimulate the economic development of the 48 eastern Tennessee counties.

In addition, the University created two specialized research and public service units to provide much needed help in the two critical areas of transportation and energy. These two agencies are:

Environment Center (EC)--established in 1972 to deal with topics such as preservation of the environment, identification of alternate sources of energy, and conservation of existing energy resources;

Transportation Center (TC)--created in 1970 with management of the Tennessee Department of Transportation highway research program as one of its primary functions.

Both of these centers stimulate interdisciplinary research projects, many of which have significant public service applications.

The Institute of Public Service

The nine units listed below comprise the University of Tennessee's Institute of Public Service:

Municipal Technial Advisory Service (MTAS)
Center for Industrial Service (CIS)
Center for Governmental Training (CGT)
County Technical Assistance Service (CTAS)
Civil Defense Educational Program (CDEP)
Technical Assistance Center (TAC)
State Agency for Title I
Environmental Center (EC)
Transportation Center (TC)

Individually, they have their own distinctive missions; collectively, they form under a single umbrella a non-agricultural public service organization which compares favorably with those in most states of the nation.

Organizationally, the Institute for Public Service is responsible directly to the University's Vice President for Public Service. The Institute has four managers for support services: Manager of Information Services, Manager of Program Development and Evaluation, Business Manager, and Manager of Request-for-Service System.

Coordination with other campuses is effected between the Vice President for Public Service and a public service officer on each campus, currently, the chancellor or the academic vice chancellor. Several campuses and institute units provide for the active involvement of lay and client groups in advising capacities. The faculty, staff and students located in schools, colleges, departments, and research and service organizations on University of Tennessee campuses throughout the state comprise the core of expertise of the UT public service operations.

Major concentrations of these staff are located in two Tennessee cities, Knoxville and Nashville. In addition, staff also are located strategically in seven other cities to make the full-time public service resources of the University as readily available as possible to the citizens of the state.

With the support provided by the University's faculty, who respond to more specialized requests for assistance, the UT Institute for Public Service is accomplishing one of its most important objectives--to return to the citizens of the state a dividend on their significant financial investment in the institution.

Examples of service

To illustrate the commitment to public service of the University's leadership, the president served in 1973 as chairman of the Tennessee Tax Modernization and Reform Commission; the former vice president for urban and public affairs (now public service) served in 1975 as chairman of the new governor's cabinet selection committee; the associate vice president for public service served in 1971 as staff director of the Governor's Study Committee for Economic Development; and the executive director of the institute for public service served in 1974 as the key staff person for a state-sponsored study of local government reorganization.

In addition, the expertise of individual members of the UT faculty or academic units is utilized by the state on many occasions. For example, the head of the anthropology department at UT at Knoxville assists the state medical examiner and other state and local law enforcement personnel to identify unknown human bones; a professor at UT's Center for the Health Sciences serves as the state pathologist; and UT Nashville is providing a 480-hour advanced emergency medical care program for the State Department of Public Health.

Funding

The Institute for Public Service and its various agencies are funded by federal grants, appropriations from the State General Fund, and monies designated for this purpose from local governments' portion of state-shared revenues. For example, both CTAS and MTAS receive about 60 percent of their budget from county and city-designated funds.

Total budget for all IPS operations from all sources during FY 76 was about \$3.2 million, of which approximately \$1.9 million is from state funds, \$0.8 million from local funds, and \$0.5 million from other sources.